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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Brown, R.S., et *al.*
Serial Number: 10/798,880
Filed: March 12, 2004
Title: Method of Decomposing Organophosphorus Compounds
Group Art Unit: 1621
Confirmation No.: 4890
Agent Ref. No. 2002-057-02US

Assistant Commissioner for Patents
Washington, D.C.
20231

Dear Sir,

Information Disclosure Statement

Applicants are aware of the publications listed on the attached Form PTO-1449 and, in accordance with 37 C.F.R. § 1.97, hereby submit these publications for the Examiner's consideration. Copies of all non-U.S. patent references are attached.

For the Examiner's interest, a copy of the International Search Report for corresponding International Patent Application No. PCT/CA2004/000379 is enclosed.

This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Applicants understand that the Examiner will make an independent evaluation of the cited publications.

No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. If, however, a first Office Action on the merits issues in the application bearing a mailing date prior to the date of this Information Disclosure Statement, please charge the appropriate fee as required under 37 C.F.R. §1.17(p) to our Deposit Account No. 17-0110.

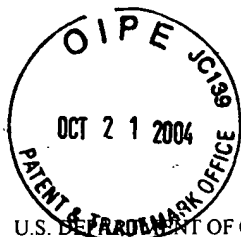
Respectfully submitted,



Stephen J. Scribner
Reg. No. 44,452

Date: 20 Oct 2004

PARTEQ Innovations
Queen's University
Kingston, Ontario K7L 3N6
CANADA
(613) 533-2342



FORM PTO-1449
(REV. 7-80)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.
2002-057-02US

SERIAL NO.
10/798,880

Sheet 1 of 4

LIST OF PUBLICATIONS CITED BY APPLICANT
(Use several sheets if necessary)

APPLICANT
BROWN, R.S., *et al.*

FILING DATE GROUP
March 12, 2004 1621

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	FILING DATE SUBCLASS	IF APPROPRIATE
_____ 1	5,859,064	Jan. 12, 1999	Cronce			
_____ 2	3,725,269	Apr. 3, 1973	Wolverton			
_____ 3	3,079,346	Feb. 26, 1963	Jackson			

FOREIGN PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	TRANSLATION SUBCLASS	YESNO
_____ 1	WO 02/072206 A1	Sept. 19, 2002	WIPO			No
_____ 2	WO 01/30452 A1	May 3, 2001	WIPO			No
_____ 3	WO 00/48684	Aug. 24, 2000	WIPO			No
_____ 4	WO 96/05208	Feb. 22, 1996	WIPO			No
_____ 5	EP 0906773 A1	Apr. 7, 1999	EP			No
_____ 6	EP 0909774 A1	Apr. 21, 1999	EP			No
_____ 7	DD 299,458	Apr. 23, 1992	DD			Yes

OTHER PUBLICATIONS (Including Author, Title, Date, Pertinent Pages, Etc.)

_____ 1 Balakrishnan, V.K., *et al.* "Catalytic Pathways in the Ethanolysis of Fenitrothion, an Organophosphorothioate Pesticide. A Dichotomy in the Behaviour of Crown/Cryptand Cation Complexing Agents". *Can. J. Chem.* 79: 157-173 (2001).

Examiner

Date Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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- _____ 2 Bosch, E., *et al.* "Retention of Ionizable Compounds on HPLC. pH Scale in Methanol-Water and the pK and pH Values of Buffers". *Analytical Chemistry*. **68**: 3651-3657 (1996).
- _____ 3 Bosch, E., *et al.* "Hammett-Taft and Drago Models in the Prediction of Acidity Constant Values of Neutral and Cationic Acids in Methanol". *J. Chem. Soc., Perkin Trans.* **2**: 1953-1958 (1999).
- _____ 4 Brown, R.S., *et al.* "Hydrolysis of Neutral Phosphate and Phosphonate Esters Catalysed by Co²⁺-chelates of Tris-imidazolyl Phosphines". *Inorganica Chimica Acta*. **108**: 201-207 (1985).
- _____ 5 Brown, R.S., *et al.* "Acyl and Phosphoryl Transfer to Methanol Promoted by Metal Ions". *J. Chem. Soc., Perkin Trans.* **2**: 1039-1049 (2002).
- _____ 6 Brown, R.S., *et al.* "La³⁺-Catalyzed Methanolysis of Hydroxypropyl-*p*-nitrophenyl Phosphate as a Model for the RNA Transesterification Reaction". *39th IUPAC Congress and 86th Conference of the Canadian Society for Chemistry*. Ottawa, Ontario. August 10-15 (2003) (ABSTRACT).
- _____ 7 Buncel, E., *et al.* "Alkali Metal Ion Catalysis in Nucleophilic Displacement by Ethoxide Ion on *p*-nitrophenyl Phenylphosphonate: Evidence for Multiple Metal Ion Catalysis". *Can. J. Chem.* **81**: 53-63 (2003).
- _____ 8 Clewley, R.G., *et al.* "Mono and Dinuclear M²⁺ Chelates as Catalysts for the Hydrolysis of Organophosphate Triesters". *Inorganica Chimica Acta*. **157**: 233-238 (1989).
- _____ 9 Desloges, W., *et al.* "Zn²⁺-Catalyzed Methanolysis of Phosphate Triesters: A Process for Catalytic Degradation of the Organophosphorus Pesticides Paraoxon and Fenitrothion". *Inorganic Chemistry*. *submitted (2003)*.

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- _____ 10 Gans, P., *et al.* "Investigation of Equilibria in Solution. Determination of Equilibrium Constants with the HYPERQUAD Suite of Programs". *Talanta*. **43**(10): 1739-1753 (1996).
- _____ 11 Gibson, G., *et al.* "Potentiometric Titration of Metal Ions in Methanol". *Can. J. Chem.* **81**: 495-504 (2003).
- _____ 12 Ketelaar, J.A.A., *et al.* "Metal-catalysed Hydrolysis of Thiophosphoric Esters". *Nature*. **177**: 392-393 (1956).
- _____ 13 Khan, A., *et al.* "Strong Zn²⁺ and Co²⁺ Catalysis of the Methanolysis of Acetyl Imidazole and Acetyl Pyrazole". *Can. J. Chem.* **77**: 1005-1008 (1999).
- _____ 14 Nagelkerke, R., *et al.* "Alkali-metal Ion Catalysis and Inhibition in Nucleophilic Displacement Reactions at Carbon, Phosphorus and Sulfur Centres. IX. *p*-Nitrophenyl Diphenyl Phosphate". *Org. Biomol. Chem.* **1**: 163-167 (2003).
- _____ 15 Neverov, A.A., *et al.* "Catalysis of the Methanolysis of Acetylimidazole by Lanthanum Triflate". *Can. J. Chem.* **78**: 1247-1250 (2000).
- _____ 16 Neverov, A.A., *et al.* "La³⁺-Catalyzed Methanolysis of Phosphate Diesters. Remarkable Rate Acceleration of the Methanolysis of Diphenyl Phosphate, Methyl *p*-Nitrophenyl Phosphate, and Bis(*p*-nitrophenyl) Phosphate". *Inorganic Chemistry*. **40**: 3588-3595 (2001).
- _____ 17 Neverov, A.A., *et al.* "Catalysis of Transesterification Reactions by Lanthanides - Unprecedented Acceleration of Methanolysis of Aryl and Alkyl Esters Promoted by La(OTf)₃ at Neutral pH and Ambient Temperatures". *Can. J. Chem.* **79**: 1704-1710 (2001).

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- _____ 18 Neverov, A.A., *et al.* "Catalysis of the Methanolysis of Activated Amides by Divalent and Trivalent Metal Ions. The Effect of Zn^{2+} , Co^{2+} , and La^{3+} on the Methanolysis of Acetylimidazole and Its $(\text{NH}_3)_5\text{Co}^{\text{III}}$ Complex". *J. Am. Chem. Soc.* **123**: 210-217 (2001).
- _____ 19 Neverov, A.A., *et al.* "Europium Ion Catalyzed Methanolysis of Esters at Neutral pH and Ambient Temperature. Catalytic Involvement of $\text{Eu}^{3+}(\text{CH}_3\text{O})-(\text{CH}_3\text{OH})_x$ ". *Inorganic Chemistry*. **42**: 228-234 (2003).
- _____ 20 Okano, T., *et al.* "Transesterification Catalyzed by Lanthanoid Tri-2-propoxides". *Chemistry Letters*. 246-258 (1995).
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- _____ 22 Tsang, J.S.W., *et al.* " La^{3+} -Catalyzed Methanolysis of Hydropropyl-*p*-nitrophenyl Phosphate as a Model for the RNA Transesterification Reaction. *J. Am. Chem. Soc.* **125**: 1559-1566 (2003).
- _____ 23 Tsang, J.S.W., *et al.* "Billion-fold Acceleration of the Methanolysis of Paraaxon Promoted by $\text{La}(\text{OTf})_3$ in Methanol". *J. Am. Chem. Soc.* **125**: 7602-7607 (2003).
- _____ 24 Yang, Y.-C., *et al.* "Decontamination of Chemical Warfare Agents". *Chem. Rev.* **92**: 1729-1743 (1992).
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- _____ 27 Yang, Y.-C. "Chemical Detoxification of Nerve Agent VX". *Acc. Chem. Res.* **32**: 109-115 (1999).

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